# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
	)	
Puget Sound Energy, Inc.	)	
	)	
Request for Waiver of Sections 90.209(b) and	)	
Section 90.155	)	
	)	
Implementation of Sections 309(j) and 337 of	)	WT Docket No. 99-87
the Communications Act of 1934, as Amended	)	
	)	
Promotion of Spectrum Efficient Technologies	)	RM-9332
on Certain Part 90 Frequencies	)	

# REQUEST FOR EXTENSION OF NARROWBANDING DEADLINE AND FOR EXTENDED IMPLEMENTATION AUTHORITY

# PUGET SOUND ENERGY, INC.

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Its Attorney

Dated: April 6, 2012

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#### **EXECUTIVE SUMMARY**

Pursuant to Section 1.925 of the Commission's Rules, Puget Sound Energy, Inc. ("PSE") requests a 10-month extension, to October 31, 2013, to comply with the Commission's requirement to narrowband its Part 90 radio channels in the 150-174 MHz and 450-512 MHz bands. PSE also requests waiver of Section 90.155 of the Commission's Rules to extend from December 31, 2012, until October 31, 2013, the time within which PSE is authorized to construct certain narrowband Part 90 facilities for which PSE currently holds licenses.

PSE has been working diligently and in good faith since 2007 to complete the steps that will be necessary for it to reconfigure the private mobile radio service ("PMRS") facilities that PSE uses to support its provision of electric and gas utility service to the public. In addition to complying with the FCC's narrowbanding mandate, PSE is using this opportunity to consolidate PSE's existing PMRS systems that operate in the VHF, UHF and 900 MHz band and to upgrade the entire system to a trunked, narrowband system on a common frequency band and technology platform with improved reliability and service features.

Due to circumstances beyond PSE's control, PSE foresees that it will need up to ten (10) additional months, through October 31, 2013, to complete the transition. PSE's transition is complex, involving more than 60 radio sites, an average of 3 to 4 channels per site, 75 console positions, and approximately 2,000 mobiles and portables. Permitting and environmental reviews at over 50 sites have taken longer than anticipated, and no construction work can commence at these sites until these tasks are completed. Frequency planning has also been disrupted by ongoing FCC administrative proceedings that have delayed assignment to PSE of critical spectrum resources. Because PSE's operating policies restrict it from undertaking major modifications to its radio system during the peak storm season in the Pacific Northwest, PSE is

effectively limited to constructing the system in the April through October timeframe. Furthermore, access to remote PMRS sites during the Pacific Northwest storm season can be exceedingly difficult, if not impossible. While PSE anticipates completing the major portion of the network by the fall of 2012, any remaining work will have to be deferred until the summer and fall of 2013.

PSE is well on the way to completing the transition. Management has committed more than \$36 million for this project with about two-thirds of that already spent. In addition to developing detailed engineering plans for the system and commencing permitting and site development processes, the majority of the radio system infrastructure has been procured, tested, and warehoused pending delivery to PSE's sites once they are ready for installation work to begin. A portion of the system is being tested and will be made operational in April 2012.

PSE does not interoperate with neighboring utilities so a brief extension for PSE to continue operating its wideband Part 90 system will have no detrimental impact on interoperability. Moreover, because PSE is migrating the majority of its system to Part 80 spectrum, PSE anticipates being able to relinquish a substantial number of Part 90 VHF and UHF channels, with the precise number of channels to be determined once PSE finalizes its channel re-use plan and completes system testing.

For all of the foregoing reasons and as further explained in this request, PSE submits that a 10-month extension of the narrowbanding deadline would serve the public interest by allowing PSE to safely and efficiently migrate its users to the enhanced radio system with no detrimental impact anticipated to other licensees and the potential for more VHF and UHF spectrum to be made available to other Part 90 licensees.

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# REQUEST FOR EXTENSION OF NARROWBANDING DEADLINE AND FOR EXTENDED IMPLEMENTATION AUTHORITY

Pursuant to Section 1.925 of the Commission's Rules, Puget Sound Energy, Inc. ("PSE") hereby requests a limited extension of the Commission's January 1, 2013, deadline for narrowbanding Part 90 radio channels in the 150-174 MHz and 450-512 MHz bands authorized under the call signs listed in Attachment A hereto. This request is submitted pursuant to the guidelines in the Commission's Public Notice of July 13, 2011, DA 11-1189, and its supplemental Public Notice of February 21, 2012, DA 12-246.

Bands Seeking Waivers of the January 1, 2013 Narrowbanding Deadline, Public Notice, DA 12-

246, released February 1, 2012.

<sup>&</sup>lt;sup>1</sup> See Wireless Telecommunications Bureau, Public Safety and Homeland Security Bureau, and Office of Engineering and Technology Provide Reminder of January 1, 2013 Deadline for Transition to Narrowband Operations in the 150-174 MHz and 421-512 MHz Bands and Guidance for Submission of Requests for Waiver and Other Matters, *Public Notice*, 26 FCC Rcd 9647 (2011); Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau Provide Supplemental Guidance for Licensees in the 150-174 MHz and 421-512 MHz

PSE also requests waiver of Section 90.155 of the Commission's Rules to extend from December 31, 2012, until October 31, 2013, the time within which PSE is authorized to construct the narrowband Part 90 facilities authorized under the call signs listed in Attachment B hereto. As explained herein, PSE has been working diligently and in good faith over the last several years to complete the steps that will be necessary for it to reconfigure its private mobile radio service ("PMRS") facilities in order to meet the January 1, 2013, narrowbanding deadline. However, due to circumstances beyond its control, including the need to avoid making major modifications to its radio system during the peak storm season extending from the end of October through March, PSE foresees that it will need up to ten (10) additional months, through October 31, 2013, to complete the transition. In support of this request, the following is respectfully submitted.

# I. Background

### A. PSE's Existing Radio Systems

PSE is Washington State's oldest and largest energy utility, serving approximately 1 million electric customers and nearly 750,000 natural gas customers in a 6,000 square mile service territory in the Puget Sound area of western Washington. To efficiently provide public utility services to the residential, commercial and industrial customers in its service area, PSE relies on private communications facilities, including PMRS facilities operating in a number of discrete Part 90 radio bands, including a 900 MHz, eight-site centralized trunking system, a thirty-one site simplex VHF system, and numerous UHF campus radio systems.

In an effort to improve operating efficiencies and to meet the FCC's January 1, 2013, narrowbanding deadline for the narrowbanding of its VHF and UHF channels, PSE decided to implement a new consolidated radio system for both its electric and natural gas operations. In furtherance of these plans, PSE has been actively engaged in licensing new frequencies for

trunked operation and in acquiring additional spectrum assets through the secondary market that can be used in this wide-area system.<sup>2</sup> PSE's current radio systems operate in disparate frequency bands and function autonomously from one another. This inhibits interoperability among the PSE's business units, and does not readily permit introduction of advanced service features needed by PSE's service personnel.

## B. PSE's Consolidated Radio System Project

In addition to addressing the narrowbanding requirement PSE also needed to address the shortcomings of its current land mobile radio network, PSE undertook an extensive analysis of its existing communications assets and user requirements in order to improve the company's ability to respond to emergencies and also to improve efficiency of routine operations throughout the company. Based on this analysis, PSE's management initiated the Consolidated Radio System Project to develop a common communications platform on which all business units can rely.

Given the scope of the Consolidated Radio System, PSE determined that a wide-area trunked system would be required. However, because no spectrum has been specifically allocated or reserved for trunked utility operations such as this, PSE was required to seek out a sufficient quantity of spectrum in the VHF band through coordination of Part 90 VHF frequencies for trunking authorization and through license assignments in the secondary market. PSE believes it has obtained most of the spectrum it will need in order to migrate all of its existing land mobile services onto one frequency band. PSE also envisions needing to request

by October 31, 2013.

<sup>&</sup>lt;sup>2</sup> PSE previously requested, and was granted, a waiver of Section 90.155 of the Commission's Rules to permit "slow growth" implementation of a number of narrowband Part 90 channels that might be used in the new system once PSE has fully assessed its channel re-use plan. As explained herein, PSE is hereby requesting further extension of time to construct these narrowband channels to coincide with PSE's estimate that it will fully migrate to the new system

modification of a number of its existing Part 90 VHF licenses as it develops its frequency reuse plan. As explained more fully below, the entire project was designed to ensure completion prior to the January 1, 2013, deadline for Part 90 narrowbanding. PSE's intent was to avoid the unnecessary time and expense of narrowbanding VHF and UHF channels that would not remain part of the system after consolidation.

PSE estimates that the consolidated radio system, when complete, will include more than 60 distinct radio sites averaging 3 to 4 channels per site, with 75 console positions and approximately 2,000 subscriber units, consisting of about 900 portables and 1,100 mobiles. PSE estimates that the total project cost for the consolidated radio system will be in excess of \$36 million. PSE's new radio system is a trunked, narrowband system having the same narrowband efficiency standards established in the FCC's Refarming Proceeding for Part 90 radio systems. This system is more complex than land mobile systems typically licensed in the VHF band, due to the wide area involved and the use of trunking technology.

#### II. Waiver Standards

Pursuant to Section 1.925 of the Commission's Rules, the Commission may waive the application of any rule if the party seeking waiver shows that (1) the underlying purpose of the rule would not be served or would be frustrated by application to the instant case, and that grant of the waiver would be in the public interest; or (2) that, in view of the "unique or unusual factual circumstances" of the instant case, application of the rule would be "inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative." The FCC may also waive any rule, under Section 1.3 of the Commission's Rules, for "good cause shown."

<sup>&</sup>lt;sup>3</sup> 47 C.F.R. § 1.925(b)(3).

<sup>&</sup>lt;sup>4</sup> 47 C.F.R. § 1.3.

The Commission has listed a number of factors that it will consider when reviewing a request for waiver of the narrowbanding deadline, including (1) the steps that have been taken to complete the transition to narrowband operations; (2) system size and complexity; (3) whether equipment must be replaced or upgraded; (4) whether the licensee plans additional system upgrades or improvements in addition to narrowbanding; (5) funding sources; (6) relationships with neighboring systems due to interoperability or interdependencies; (7) impact of extended wideband operations on co-channel and adjacent channel operations; and (8) whether the licensee will relinquish VHF/UHF spectrum. The Commission has also recommended that licensees requesting waiver also provide a list of VHF and UHF frequencies that will be relinquished if they are migrating to a different band.

## III. PSE Satisfies the Standards for a Waiver of the Narrowbanding Deadline

As explained herein, PSE meets the criteria established by the Commission for a brief, 10-month extension of the narrowbanding deadline.

#### A. Steps taken to complete the transition to narrowband operations

PSE has been working diligently since 2007 to meet the Commission's January 1, 2013, narrowbanding deadline. The following is a high-level summary of the efforts PSE has taken to complete the transition.

<u>August 2007</u> -- PSE included a \$15 million place-holder for narrowbanding of its radio system in a multi-year budget forecast.

<u>August 2008</u> -- PSE initiated internal discussions on requirements and options for narrowbanding; formed a project team consisting of a project engineer, radio foreman and radio technicians.

October 2008 -- PSE releases Request for Proposals (RFP) for identifying project requirements and options

<u>November 2008</u> -- PSE executes contract with engineering consulting firm to develop system requirements and transition plan.

<u>January/February 2009</u> – PSE's consultants prepared and delivered to PSE System Requirements Document (SRD) that identified the following recommend goals for PSE's radio system:

- Compliance with the FCC's January 1, 2013 narrowband mandate.
- Improve coverage in specific locations around the system.
- Provide additional channel capacity to reduce congestion and allow segregation of the system during restoration operations.
- Reduce single points of failure at "hub" locations such as routers/switches and/or controllers.
- Enhance mobile-to-mobile radio communication.
- Resolve end-of-life issues related to the console system.
- Improve interoperability within PSE, specifically in Electric Operations between diverse systems serving Power Production (450 MHz) and Transmission & Distribution Operations (150 MHz).
- Simplify operation of the system to promote safety, improve utilization, and reduce the need for extensive user training.

<u>May 2009</u> – Given the complexity of this multi-year project, with an estimated capital cost exceeding \$36 million, PSE hired a dedicated Project Manager.

<u>June through August 2009</u> -- Preparation and submission of business case to PSE's IT Steering Committee, which approved the project and funding.

<u>August/September 2009</u> – PSE radio technicians completed site inventories and site surveys on over 55 sites.

October 2009 -- Begin VHF frequency acquisition efforts; complete preliminary radio frequency (RF) design and channel planning (about 1,000 hours of consultant and contractor effort).

November 2009 -- The project management plan was submitted to PSE project sponsors at the end of November 2009 and was approved at the beginning of January 2010. It established a project cost baseline of roughly \$36 million and a timeline to complete the project by January 1, 2013.

October thru November 2009 -- Compile and prepare drawings for existing PSE radio sites.

<u>February 2010</u> -- Finalized preliminary RF coverage and channel plans.

<u>March through May 2010</u> -- Negotiated and executed agreements for the purchase of spectrum that could be used for centralized trunking operations in PSE's utility service area.

May 2010 – Began site enhancements at about 10 radio sites.

<u>June 2010</u> – Preparation and submission of applications for consent to assignment of licenses.

<u>August 2010</u> -- Released RFP for equipment and installation services.

<u>November 2010</u> -- Executed agreement with utility contractor to perform design, procurement, and construction at over 60 sites, including site enhancements and site development.

November 2010 – FCC granted consent to assignment of a portion of the licenses sought by PSE.

Application for assignment of the remaining spectrum licenses remains pending at the FCC and is subject to completion of an administrative hearing.<sup>5</sup>

<u>January 2011</u> -- Designs completed for the first 12 site enhancements.

<u>March through May 2011</u> – Negotiation and execution of agreement for equipment and installation services following completion of RFP process and bid evaluations.

<u>March 2011</u> -- PSE completed scope assessments for more than 60 radio and console sites.

<u>April 2011</u> -- Execution of contract with tower contactor to assist with preparation and submission of permit applications, as well as guidance through the permitting process with jurisdictions at over 50 sites permitting support for new or modified transmitter sites at over 50 sites. This activity continues to require significant attention by PSE.

June 2011 -- Radio and console system design work begins.

October 2011 -- The prime equipment vendors on the project completed, and PSE approved, a baseline system design after roughly 4 months of work involving hundreds of hours of engineering effort.

October 2011 -- Completed installation of primary console system at PSE's Eastside Operations center (ESO), the primary dispatch and emergency/storm response center for PSE's Electric and Gas Operations. A console controller interfaced with PSE's existing electric operations radio communications system and 35 dispatch console positions were successfully installed and tested during October 2011. Proof of successful execution of this part of the project occurred when a significant storm event occurred in the Puget Sound area in January 2012 and the system operated without any problems.

<sup>&</sup>lt;sup>5</sup> Maritime Communications/Land Mobile, LLC, *Order to Show Cause, Hearing Designation Order, and Notice of Opportunity for Hearing*, EB Docket No. 11-71, 26 FCC Rcd 6520 (2011).

October 2011 -- Preparation and submission of applications for site licenses for PSE's operations at the Lower Snake River (LSR) wind farm.

October through December 2011 -- The majority of radio system infrastructure and 3<sup>rd</sup> party equipment (antennas, combiners, etc.) was manufactured and ordered by the factory in New Zealand during the fourth quarter of 2011. This included manufacturing of 6 node controllers and 60 sites' worth of radio equipment (almost 200 base stations). Subscriber unit manufacturing will take place during mid-2012.

<u>December 2011</u> -- PSE's radio infrastructure was crated and shipped to the manufacturer's facilities in Houston, TX in December 2011. Additionally, many 3<sup>rd</sup> party items including antennas, combiners, and various materials were shipped from their respective vendors to the prime contractor's warehouse in Houston.

<u>December 2011</u> -- PSE receives FCC approval to operate the LSR sites and begins work with the prime contractor to finalize installation and perform testing/commissioning of these sites in order to begin operations by April 1, 2012.

<u>January 2012</u> – PSE participated in a Factory Acceptance Test of the radio infrastructure equipment at the manufacturer's staging warehouse in Houston, TX.

<u>January 2012</u> - Design, procurement, and enhancement/construction efforts at an additional 13 radio sites is underway during the first quarter of 2012.

<u>February through April 2012</u> -- Installation and commissioning of a node controller and 4 radio sites at PSE's LSR wind farm. It is anticipated that this part of the system will be fully tested, personnel trained, and they system operational by April 30, 2012.

As can be seen, PSE has been working diligently with its consultants and contractors to develop and implement an enhanced radio system by the January 1, 2013, narrowbanding deadline.

### **B.** System size and complexity

PSE estimates that the consolidated radio system, when complete, will include more than distinct radio sites averaging 3 to 4 channels per site, with 75 console positions and approximately 2,000 subscriber units, consisting of about 900 portables and 1,100 mobiles. PSE estimates that the total project cost for the consolidated radio system will be in excess of \$36 million. As indicated above, the planning, design, and construction of this system is far more

involved that the "typical" Part 90 PMRS system. In addition, the system must be constructed and cut-over with no disruption of communications service to PSE employees.

# C. Whether equipment must be replaced or upgraded

PSE's outside consultants concluded early in this project that PSE's current radio system is outdated, and is using inefficient and, in some cases, irreplaceable components. For example, the 900 MHz system used by Gas Operations relies on hardware and software that are no longer supported by the original equipment manufacturers. PSE concluded that successful completion of this project will allow PSE to comply with the FCC's narrowbanding requirement and ensure successful operation and control of this mission-critical system well into the future. Aside from retaining some of the infrastructure at PSE's radio sites, this project will entail a complete rebuild of the land mobile radio system.

# D. Whether the licensee plans additional system upgrades or improvements in addition to narrowbanding

As described above, PSE agreed with its consultant's recommendations that the existing radio network should be rebuilt for a number of reasons beyond lack of replacement equipment:

- Improve coverage in specific locations around the system.
- Provide additional channel capacity to reduce congestion and allow segregation of the system during restoration operations.
- Reduce single points of failure at "hub" locations such as routers/switches and/or controllers.
- Enhance mobile-to-mobile radio communication.
- Resolve end-of-life issues related to the console system.
- Improve interoperability within PSE, specifically in Electric Operations between diverse systems serving Power Production (450 MHz) and Transmission & Distribution Operations (150 MHz).
- Simplify operation of the system to promote safety, improve utilization, and reduce the need for extensive user training.

The decision to upgrade the system, instead of simply narrowbanding the existing VHF and UHF frequencies was not made lightly, given the significant cost, time and disruption to normal operations occasioned by the system upgrade. PSE concluded that the significantly enhanced performance that it will obtain from the new radio system is well worth the incremental cost over attempting to narrowbanding the existing VHF and UHF channels operating in shared spectrum.

## E. Funding sources

PSE's management has committed a significant amount of money towards meeting the narrowbanding mandate and the concurrent system upgrade. Internal corporate sponsors for the project have approved an overall budget of over \$36 million for the Consolidated Radio System project with approximately two-thirds of that already spent.

# F. Relationships with neighboring systems due to interoperability or interdependencies

PSE's current PMRS system operates independently of similar systems used by neighboring utilities or jurisdictions. Therefore, if PSE is granted additional time to retain operations on its Part 90 wideband VHF and UHF channels there will be no impact on interoperability or interdependencies with other licensees.

# G. Impact of extended wideband operations on co-channel and adjacent channel operations

PSE is not aware of any negative impact to co-channel or adjacent channel operations if PSE retains wideband operations for an extended period of time. As noted above, PSE does not interoperate or have any other interdependencies with other licensees on its wideband PMRS system.

# H. Whether the licensee will relinquish VHF/UHF spectrum

PSE anticipates being able to relinquish a substantial number of Part 90 VHF and UHF channels as it migrates its system to new technology that will operate primarily on exclusive spectrum that PSE has either acquired in the secondary market or has under contract to acquire, pending FCC grant of consent to assignment of license. Until PSE finalizes its channel re-use plan (which will also be contingent on whether PSE can acquire the additional non-Part 90 channels) and completes system testing, PSE is unable to state definitively how many Part 90 channels can be relinquished.

# IV. Circumstances Warranting an Extension of the Deadline and Proposed Timetable for Completion of Narrowbanding

PSE foresees a possibility, if not a likelihood, that it will not be able to cut-over from its existing Part 90 wideband channels by the January 1, 2013, narrowbanding deadline. Despite PSE's best efforts, as documented above, PSE has a significant amount of work remaining to achieve compliance. The major action items that remain are the following:

### Completion of detailed design punch list

Although detailed design efforts were considered substantially complete in December 2011, there remains a significant punch list of design items remaining. These include final adjustments to coverage design, console integration, and radio system configuration, as well as design of the audio interface to our voice logging recorder. It is likely that there is 6-8 months remaining to complete these design efforts.

## Radio system deployment, installation, and testing

PSE's prime contractor is responsible for installation and testing of the radio and console systems. These work efforts require significant coordination with PSE's project team as PSE has stringent requirements for providing escorts to sites, arranging and approving change controls for any work that puts PSE's electric and gas systems at risk of outage, and PSE's responsibility for completing site upgrades, development of new sites, and performing make-ready work at all sites. PSE's current project schedule estimates 10 months of installation and testing work will remain beyond the January 1, 2013, narrowbanding deadline, with much of this contingent on PSE's ability to complete permitting and construction at radio sites.

## Permitting and NPA/SHPO work

PSE is working with local Tribes, the State Historic Preservation Officer (SHPO), and a local cultural resource/archeological consulting firm to identify and document the necessary actions that must be taken to ensure that PSE is in compliance with the FCC's mandatory processes regarding the National Programmatic Agreement on Historic Preservation (NPA). As part of this effort, PSE is conducting cultural resource studies, archeological explorations, and working through the FCC online Tower Construction Notification System (TCNS) as necessary. PSE attempted to minimize the construction of new antenna structures, but believes that there will be approximately seventeen (17) sites that will need to go through some portion of the Section 106-related review process. The typical cultural study report development and Section 106 review process timeframe is approximately 4 to 5 months in duration. NPA-related efforts must be completed prior to commencing site construction work. PSE is actively working with its cultural resource/archeological consulting firm to complete necessary reports and reviews.

## Completion of site enhancements

There are a total of over 60 radio, console, and controller equipment sites in the new radio system. The majority of these need some type of site enhancements, upgrades, and development. This work includes grounding/bonding improvements; DC battery and generator installations; structural analysis and retrofits to antenna structures, and equipment shelter improvements. There are also several brand new, "greenfield" sites requiring development. As of March 2012, roughly half of these sites (mostly sites that PSE is leasing and "greenfield" sites) have not been upgraded or constructed. In most cases, construction is being delayed by the permitting and site leasing process. As detailed above, PSE's infrastructure contractor is currently completing designs for construction work at 13 sites with construction expected to be completed by the end of Summer 2012. It is anticipated that it will take until the Summer of 2013 to complete construction at 5-10. Most of these sites provide critical coverage to PSE service areas.

### Interference analyses for remaining sites

Because PSE's Consolidated Radio System will largely operate on spectrum allocated for Automated Maritime Telecommunications Systems ("AMTS"), PSE is required by the FCC's Rules to consider the impact of its operations on reception of television broadcast signals on channels 10 and 13 and to take steps to eliminate any such interference that it causes. Until January 2012, it was not clear to PSE how it should analyze the impact of its operations on reception of digital television signals because the Rules governing AMTS were adopted long before the conversion of television broadcasting from analog to digital. In January 2012, the FCC released an Order that provided significant clarification on how AMTS licensees such as PSE should analyze the impact of their land mobile operations on DTV reception. Since the release of that Order, PSE has been able to undertake interference analyses and develop interference mitigation plans that re

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<sup>&</sup>lt;sup>6</sup> Avista Corporation, *Order*, 27 FCC Rcd 263 (WTB MD 2012)

consistent with the FCC's Rules and with the methodology suggested in the FCC's recent Order. However, PSE expects that the process to prepare and file these studies for all relevant sites could extend into 2013.

# System acceptance and coverage testing

The last phase of deployment will involve system and coverage testing. It is expected that this phase of the project will take several months as drive testing of the entire PSE coverage area itself will take 1-2 months. PSE anticipates final system acceptance will take place after verification of coverage, various failure/failover scenarios have been tested, and all radio sites, subscriber units, and node controller equipment has been verified to properly and thoroughly work.

# Integration of new radio system into PSE voice logging recorder

All communications on PSE's existing radio systems are recorded and logged by an analog voice logging recorder that is not compatible with the new radio and console systems. Upgrades can be made to PSE's existing voice logging recorder but the manner in which recorders are stored and method for retrieval make it extremely challenging for end-users to identify and retrieve recorded and logged conversations. As a result, the project team is working with its radio system vendors and the vendor of the legacy voice logging recorder, to design an acceptable solution. Upon completion of the solution, new voice logging equipment will need to be procured and implemented. The new radio system cannot go operational without a system for recording and logging conversations on the radio system.

## Mobile radio installations

PSE's project team has begun gathering details on vehicles and end-users to plan the mobile radio installations. It is anticipated that PSE will be installing mobile radios in over 1,100 vehicles over a 4-6 month time frame during the Summer/Fall of 2012. However, there are several challenges associated with installation of mobile radios. The majority of these vehicles already have mobile radios that work with PSE's existing radio systems and there are risks associated with taking these vehicles out of service for installations during storm season. As such, there will be a time period where these vehicles have two mobile radios installed as the new system is tested and proven. Only after the new system goes live, can the old mobile radios be removed. Therefore, it is imperative that new mobiles not be installed too soon and that they are installed just prior to the new system becoming operational. Several crews will be involved in mobile radio installation so that multiple vehicles at multiple locations can be serviced simultaneously.

# End-user and technical training

With approximately 2,000 end-users requiring training on how to operate mobile radios, portable radios, and dispatch consoles; as well as a team of radio technicians needing instruction on maintenance and repair of radio and console infrastructure equipment;

training is a comprehensive and important part of the remaining project work scope. The project team needs to be sensitive to PSE Operations preference for "just-in-time" training so that end-users learn to operate the new radio system just prior to going live with the new system. This ensures the proper knowledge is retained and end-users are not trained on the new system until it is proven in the field. PSE's storm season (October through April) further complicates the deployment of training as end-users are not typically available or open to training and moving to new systems during this risky time of year. The PSE project team is currently working with the vendor's personnel to define the training curriculum, identify the pool of individuals requiring end-user training, design training course materials and training aides, and develop the schedule for training delivery.

Storm season in the Pacific Northwest is generally October through the end of March. PSE's operating policies restrict it from undertaking a major modification to the radio system when there is a strong potential for its radio system to be needed to restore electric and gas service to the public in the event of a major outage of the electric system. In practical terms, this means that PSE's prime construction window is April through October each year. Furthermore, access to remote PMRS sites during the Pacific Northwest storm season can be exceedingly difficult, if not impossible. While PSE anticipates installing the majority of the radio equipment during the summer and early fall of 2012, PSE reasonably believes that there will be approximately 5-10 sites, which provide critical coverage to PSE service areas, that will not be completed before the October 2012 storm season begins. PSE anticipates that these remaining sites can be installed in the summer of 2013, with coverage testing scheduled for July through August 2013. Full cutover from the current system to the new system should therefore be completed by the end of October 2013.

As noted above, PSE has encountered significant delays in obtaining requisite permits for transmitter sites, in securing FCC licensing for radio spectrum needed for the new system, and securing the authorization to operate on the aforementioned spectrum. PSE could not have reasonably foreseen that the Commission would delay processing of its application for consent to

assignment of AMTS licenses pending a trial-type evidentiary hearing directed at the assignor. That hearing continues, and PSE has no way of knowing when the proceeding will conclude and/or when PSE will be granted consent to acquire this spectrum. PSE therefore submits that despite diligent efforts, it has been delayed in completing this project due to circumstances beyond its control and that a brief extension of time is warranted.

#### V. CONCLUSION

PSE has acted diligently to comply with the Commission's mandate that Part 90 VHF and UHF radio systems meet the new narrowband spectrum efficiency standards by January 1, 2013. However, because of the complexity of this project in migrating from PSE's legacy wideband Part 90 radio system to an enhanced radio network using newer technology, PSE requires additional time to complete the transition from its existing wideband channels. PSE submits that a 10-month extension would serve the public interest by allowing PSE to safely and efficiently migrate its users to the enhanced radio system with no detrimental impact anticipated to other licensees. Moreover, PSE's migration to the new system will allow it to vacate a significant number of VHF and UHF channels at the conclusion of the cut-over.

WHEREFORE, THE PREMISES CONSIDERED, Puget Sound Energy, Inc. respectfully requests waiver of Section 90.209(b) of the Commission's Rules to permit continued operation on the wideband VHF and UHF channels authorized to PSE under the call signs listed in

Attachment A hereto until October 31, 2013. In addition, PSE respectfully requests waiver of Section 90.155 of the Commission's Rules to extend the authorized construction period of the call signs listed in Attachment B hereto until October 31, 2013.

Respectfully submitted,

PUGET SOUND ENERGY, INC.

By: Jeffrey L. Sheldon Jeffrey L. Sheldon Its Attorney

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Dated: April 6, 2012

# ATTACHMENT A

# CALL SIGNS FOR WHICH WAIVER OF SECTION 90.209(b) IS REQUESTED

<sup>7</sup> Waiver is requested for all frequencies at all locations authorized under these call signs

# ATTACHMENT B

# CALL SIGNS FOR WHICH WAIVER OF SECTION 90.155 IS REQUESTED

WQEJ919

WQHQ356

WQMN360

WQMN658

WQMP747

WQMQ547

WQLI605

WQLI929

WQLJ376

WQLJ638

WQLM876

WQLQ631

WQMJ921

WQLM921

<sup>8</sup> Waiver is requested for all frequencies at all locations authorized under these call signs.